

### Claim Amendments

1. (presently amended) An apparatus comprising:

a client computer ~~configured to fit in a person's hand~~, comprising:

~~a central processor unit;~~

~~a non-volatile memory device coupled to the central processor unit, said non-volatile memory being configured to store a graphics protocol engine, said graphics protocol engine comprising instructions to direct the central processing unit;~~

~~input device coupled to the central processor unit;~~

a communication device ~~coupled to the central processor unit~~ and adapted to establish a wireless communication link with one or more remotely located server computers; and

a display device coupled to the communication device ~~central processor unit~~,

wherein said ~~client computer~~ display device is adapted to act as a remote output device for ~~one or more~~ at least one client-side application programs running on said ~~one or more~~ at least one remotely located server computer without the need for a virtual execution environment on the client computer.

2. (presently amended) The apparatus as in claim 1, wherein the ~~input device is a stylus, a microphone adapted to receive speech input, a pointing device, keyboard, touch pad, jog dial, joystick, or an infrared input device~~ at least one client-side application program is an E-mail client program.

3. (presently amended) The apparatus as in claim 1, wherein the ~~one or more application programs include one active application~~ at least one client-side application program is a browser program.

4. (presently amended) ~~The apparatus as in claim 3, further comprising:~~

~~a portion of the memory device configured as a local cache; wherein drawables corresponding to the one or more application programs are stored in the cache for local retrieval and display~~

The apparatus as in claim 1, wherein the at least one client-side application program is a groupware program.

5. (presently amended) The apparatus as in claim 4, further comprising:  
first component coupled to the memory device, said first component configured to transmit a list of cached drawables for an active application to a server.

6. (presently amended) The apparatus as in claim 4, further comprising:  
second component coupled to the memory device, said second component configured to receive a compound request message from the server.

7. (original) The apparatus as in claim 6, further comprising:  
third component coupled to the memory device, said third component configured to use the compound request message to update a display state of the client computer.

8. (presently amended) The apparatus as in claim 4, further comprising:  
fourth component coupled to the memory device, said fourth component configured to transmit a user's identification information to a server; and  
fifth component coupled to the memory device, said fifth component configured to receive information regarding a list of applications previously executing for that user.

9. (presently amended) The apparatus as in claim 4, further comprising:  
sixth component coupled to the memory device, said sixth component configured to select one of a plurality of applications from a list of available applications.

10. (presently amended) The apparatus as in claim 4, further comprising:  
seventh component coupled to the memory device, said seventh component configured to decode streams of multimedia signals on the client.

11. (original) The apparatus as in claim 10, wherein the seventh component comprises an MPEG decoder.

12. (presently amended) The apparatus as in claim 1, ~~wherein the input device includes:~~

~~a microphone adapted to receive spoken input, and~~

~~a voice activity detector;~~

~~whereby the voice activity detector is configured to be activated upon the detection of a speech input present at the microphone.~~

further comprising:

a memory device coupled to communications device, said memory device being configured to store drawables corresponding to the at least one client-side application program.

13. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is a financial application program ~~12, wherein the processor is programmed to instruct the voice activity detector to detect speech input present at the microphone, and transmit the detected speech.~~

14. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is a calendar application program ~~13, wherein the speech input is directed toward an active application.~~

15. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is a location-based service application program ~~13, wherein the speech input is directed toward an application list manager (ALM) module; said ALM module is configured to manage an application.~~

16. (presently amended) An apparatus comprising:

a client computer configured to fit in a person's hand, comprising:

a central processor unit;

memory device coupled to the central processor unit, said memory being configured to store instructions to direct the central processing unit;

~~input device coupled to the central processor unit;~~

a communication device coupled to the central processor unit and adapted to establish a wireless communication link with one or more remotely located server computers;

second component coupled to the memory device, said second component configured to receive a compound request message from the server wherein the compound request message comprises a plurality of events generated in a predetermined time period;

third component coupled to the memory device, said third component configured to use the compound request message to update a display state of the client computer; and

a display device coupled to the central processor unit,

wherein said client computer device is adapted to act as a remote output device for ~~one or more~~ at least one client-side application programs running on at least one of said ~~one or more~~ remotely located server computers over a wide-area mobile network without the need for an execution environment on the client computer.

17. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a browser program ~~the input device is a stylus, a microphone adapted to receive speech input, a pointing device, a keyboard, a touch pad, a jog dial, joystick, or an infrared input device.~~

18. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is an E-mail client program ~~17, wherein the one or more at least one client-side application programs includes one active application.~~

19. (original) The apparatus as in claim 16, further comprising:

a portion of the memory device configured as a local cache; wherein drawables corresponding to the one or more application programs are stored in the cache for local retrieval and display.

20. (presently amended) The apparatus as in claim 16, further comprising:

fourth component coupled to the communication device, said fourth component configured to transmit a user's identification information to a server; and

fifth component coupled to the communication device, said fifth component configured to receive information regarding a list of applications previously executing for that user.

21. (presently amended) The apparatus as in claim 16, further comprising:

sixth component coupled to the communication device, said sixth component configured to select one of a plurality of applications from a list of available applications.

22. (presently amended) The apparatus as in claim 16, further comprising:

seventh component coupled to the communication device, said fourth component configured to decode streams of multimedia signals on the client computer.

23. (presently amended) The apparatus as in claim 22, wherein the seventh component comprises an MPEG decoder.

24. (original) The apparatus as in claim 16, further comprising: first component coupled to the memory device, said first component configured to transmit a list of cached drawables for an active application to a server.

25. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a groupware program ~~input device includes: a microphone adapted to receive spoken input, and a voice activity detector, whereby the voice activity detector is configured to be activated upon the detection of speech input present at the microphone.~~

26. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a financial services application program ~~25, wherein the processor is programmed to instruct the voice activity detector to detect speech input present at the microphone, and transmit the detected speech.~~

27. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a calendar service application program ~~25, wherein the speech input is directed toward an active application.~~

28. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a location-based service application program—25, wherein the speech input is directed toward an application list manager (ALM) module, said ALM module is configured to manage an application.

29. (canceled) An apparatus comprising:

~~a server computer, comprising:~~

~~a central processor unit;~~

~~a non-volatile memory device coupled to the central processor unit, said non-volatile memory being configured to store instructions for a graphics protocol engine to direct the central processing unit;~~

~~a communication device coupled to the central processor unit and adapted to establish a wireless communication link with one or more remotely located client computers; and~~

~~instructions stored in the memory device, said instructions configured to instruct the central processor unit to establish a session with a remote client over a wireless communication network, execute an application on the server computer, and establish a communication path with the remote client such that the remote client is established as an input/output device for the server-run application.~~

30. (presently amended) A method of establishing a client-server communication between a client computer and a server computer, said method comprising the steps of:

establishing a session between the client computer and the server computer, said client and server computer being connected using a wireless network;

executing ~~an~~ a client-side application program on the server computer;

exporting display of the application program to the client computer;

receiving a user input at the server computer; and

construing the user's input at the server computer.

31. (presently amended) The method as in claim 30, wherein the step of establishing a session between the client and the server computer comprises the step of:

transmitting server system information to the client computer.

32. (presently amended) The method as in claim 30, further comprising the step of:

aggregating a number of requests to be sent to the client computer; and  
transmitting the aggregated requests as a compound request to the client computer.

33. (presently amended) The method as in claim 30, further comprising the step of:

maintaining a cache of drawables transmitted to the client computer; and  
replaying the client computer's state when the client computer reestablishes connection with the server computer.

34. (presently amended) The method as in claim 30, wherein the input from the client computer is received in a multimodal form.

35. (presently amended) The method as in claim 30, further comprising:  
an event system proxy, said event system proxy receives speech input from the client computer;

a speech recognition server, which receives speech input from the event system proxy,

whereupon the server computer is configured to interact with the speech recognition server, construe the speech input at the speech recognition server, and instruct the client computer in accordance with the construed speech.

36. (original) The method as in claim 30, further comprising the step of:  
selectively disabling substreams of audio/visual data.

37. (original) The method as in claim 36, further comprising the step of:

receiving an instruction from a user to selectively disable substreams of audio/visual data.



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1. (presently amended) An apparatus comprising:  
a client computer, comprising:  
a communication device adapted to establish a wireless communication link with one or more remotely located server computers; and  
a display device coupled to the communication device,  
wherein said display device is adapted to act as a remote output device for at least one client-side application programs running on said at least one remotely located server computer without the need for a virtual execution environment on the client computer.
2. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is an E-mail client program.
3. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is a browser program.
4. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is a groupware program.
5. (presently amended) The apparatus as in claim 4, further comprising:  
first component coupled to the memory device, said first component configured to transmit a list of cached drawables for an active application to a server.
6. (presently amended) The apparatus as in claim 4, further comprising:  
second component coupled to the memory device, said second component configured to receive a compound request message from the server.
7. (original) The apparatus as in claim 6, further comprising:  
third component coupled to the memory device, said third component configured to use the compound request message to update a display state of the client computer.
8. (presently amended) The apparatus as in claim 4, further comprising:  
fourth component coupled to the memory device, said fourth component configured to transmit a user's identification information to a server; and  
fifth component coupled to the memory device, said fifth component configured to receive information regarding a list of applications previously executing for that user.
9. (presently amended) The apparatus as in claim 4, further comprising:

sixth component coupled to the memory device, said sixth component configured to select one of a plurality of applications from a list of available applications.

10. (presently amended) The apparatus as in claim 4, further comprising:

seventh component coupled to the memory device, said seventh component configured to decode streams of multimedia signals on the client.

11. (original) The apparatus as in claim 10, wherein the seventh component comprises an MPEG decoder.

12. (presently amended) The apparatus as in claim 1, further comprising:

a memory device coupled to communications device, said memory device being configured to store drawables corresponding to the at least one client-side application program.

13. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is a financial application program.

14. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is a calendar application program.

15. (presently amended) The apparatus as in claim 1, wherein the at least one client-side application program is a location-based service application program.

16. (presently amended) An apparatus comprising:

a client computer configured to fit in a person's hand, comprising:

a central processor unit;

memory device coupled to the central processor unit, said memory being configured to store instructions to direct the central processing unit;

a communication device coupled to the central processor unit and adapted to establish a wireless communication link with one or more remotely located server computers;

second component coupled to the memory device, said second component configured to receive a compound request message from the server wherein the compound request message comprises a plurality of events generated in a predetermined time period;

third component coupled to the memory device, said third component configured to use the compound request message to update a display state of the client computer; and

a display device coupled to the central processor unit,  
wherein said client computer device is adapted to act as a remote output device for at least one client-side application programs running on at least one of said ~~one or more~~ remotely located server computers over a wide-area mobile network without the need for an execution environment on the client computer.

17. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a browser program.

18. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is an E-mail client program.

19. (original) The apparatus as in claim 16, further comprising:  
a portion of the memory device configured as a local cache; wherein drawables corresponding to the one or more application programs are stored in the cache for local retrieval and display.

20. (presently amended) The apparatus as in claim 16, further comprising:  
fourth component coupled to the communication device, said fourth component configured to transmit a user's identification information to a server; and  
fifth component coupled to the communication device, said fifth component configured to receive information regarding a list of applications previously executing for that user.

21. (presently amended) The apparatus as in claim 16, further comprising:  
sixth component coupled to the communication device, said sixth component configured to select one of a plurality of applications from a list of available applications.

22. (presently amended) The apparatus as in claim 16, further comprising:  
seventh component coupled to the communication device, said fourth component configured to decode streams of multimedia signals on the client computer.

23. (presently amended) The apparatus as in claim 22, wherein the seventh component comprises an MPEG decoder.

24. (original) The apparatus as in claim 16, further comprising: first component coupled to the memory device, said first component configured to transmit a list of cached drawables for an active application to a server.

25. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a groupware program.

26. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a financial services application program.

27. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a calendar service application program.

28. (presently amended) The apparatus as in claim 16, wherein the at least one client-side application program is a location-based service application program.

29. (canceled)

30. (presently amended) A method of establishing a client-server communication between a client computer and a server computer, said method comprising the steps of:  
establishing a session between the client computer and the server computer, said client and server computer being connected using a wireless network;  
executing a client-side application program on the server computer;  
exporting display of the application program to the client computer;  
receiving a user input at the server computer; and  
construing the user's input at the server computer.

31. (presently amended) The method as in claim 30, wherein the step of establishing a session between the client and the server computer comprises the step of:  
transmitting server system information to the client computer.

32. (presently amended) The method as in claim 30, further comprising the step of:  
aggregating a number of requests to be sent to the client computer; and  
transmitting the aggregated requests as a compound request to the client computer.

33. (presently amended) The method as in claim 30, further comprising the step of:

maintaining a cache of drawables transmitted to the client computer; and  
replaying the client computer's state when the client computer reestablishes connection  
with the server computer.

34. (presently amended) The method as in claim 30, wherein the input from the  
client computer is received in a multimodal form.

35. (presently amended) The method as in claim 30, further comprising:  
an event system proxy, said event system proxy receives speech input from the  
client computer;

a speech recognition server, which receives speech input from the event system  
proxy,

whereupon the server computer is configured to interact with the speech  
recognition server, construe the speech input at the speech recognition server, and instruct  
the client computer in accordance with the construed speech.

36. (original) The method as in claim 30, further comprising the step of:  
selectively disabling substreams of audio/visual data.

37. (original) The method as in claim 36, further comprising the step of:  
receiving an instruction from a user to selectively disable substreams of  
audio/visual data.